



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,029	01/19/2004	Stephen Fife Sheldon	11378	1869
7590 12/29/2006 John D. Cowart Teradata Law IP, WHQ-4W NCR Corporation 1700 S. Patterson Blvd. Dayton, OH 45479-0001			EXAMINER KINDRED, ALFORD W	
			ART UNIT 2163	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/761,029

Applicant(s)

SHELDON ET AL.

Examiner

Alford W. Kindred

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Application, filed on 10/11/06.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Goel et al., US# 5,960,427.

As per claim 1, Goel et al. teaches "identifying one or more groups of consecutive values in the set" (see fig. 5, and col. 5, lines 50-67) "removing equality conditions corresponding to the values in one or more of the identified groups; and adding one or more inequality conditions corresponding to the one or more of the identified groups" (see col. 13, lines 11-38).

As per claim 2, Goel et al. teaches "checking whether the database column is a non-indexed column" (see col. 9, lines 47-60 and col. 10, lines 13-43).

As per claim 3, Goel et al. teaches "checking whether the set of values includes only literal discrete values" (see abstract, col. 3, lines 35-45 and col. 10, lines 10-24).

As per claim 4, Goel et al. teaches "whether the set contains more values than a specified lower limit" (see col. 10, lines 10-23 and col. 14, lines 60-67).

Art Unit: 2163

As per claim 5, Goel et al. teaches "identifying the non-overlapping groups with the largest numbers of consecutive values" (see col. 5, lines 45-67 and col. 13, lines 10-36).

AS per claims 6-9, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-5 and are similarly rejected.

As per claims 10-18, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-10 and are similarly rejected.

As per claims 19-27, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-10 and are similarly rejected including the following:

■ Goel et al. teaches "a plurality of virtual process . . . rows organized in tables, an optimizer . . ." (see col. 10, lines 26-57 and col. col. 13, lines 33-51).

Response to Arguments

4. Applicant's arguments filed 10/11/06 have been fully considered but they are not persuasive.

--As per applicant's arguments regarding "Neither Figure 5 nor the specified portion of column 5 teaches the identification of 'consecutive' values . . . even mentions consecutive values, let alone identifies a group of such values in a set . . . by multiple equality conditions", examiner disagrees and maintains that Goel's teachings of a transform Groupby (i.e. 504) includes the identity of group values as illustrated in applicants claim language. Further, Goel's teachings of an SQL statement combined

Art Unit: 2163

with the Groupby statement with variable X and Y, reads on applicant's claim language involving value sets and multiple equality conditions,

--As per applicant's arguments regarding the addressing of claim 10, examiner agrees and corrected the rejection of claim 10 by referring to citations addressing element in other claims.

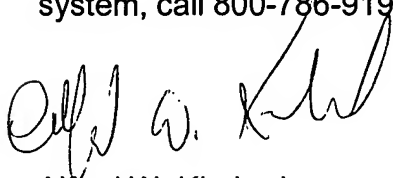
Art Unit: 2163

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 571-272-4037. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alford W. Kindred
Patent Examiner
Tech Ctr. 2100